How should Mount Rainier National Park respond to repeated flooding?

Carbon River Road
Mount Rainier National Park

Mount Rainier National Park photos

BRIEF OVERVIEW

Mount Rainier National Park has experienced repeated flooding in recent years, causing major damage to the Carbon River Road. The park's mission, the environmental considerations, the access to the public, the historical value, and budget constraints are all important factors in deciding how to deal with the problem.

THIS DOCUMENT-BASED QUESTION ASKS:

How should Mount Rainier National Park respond to the repeated flooding of the Carbon River Road?

YOUR TASK:

1. Read your **Role Card** and assume the position of your role.
2. Read the accompanying **documents** and fill out the document analysis sheets to build **evidence** to **support** your position.
3. Be ready to **persuade** the superintendent of the park to support your position.

Carbon River Flooding: Nature Takes Back Road

Built in 1921, the Fairfax Bridge carries the road over the Carbon River near Carbonado, Wash.
Washington State Dept. of Transportation photo

The Carbon River Road has fed people to the Ipsut Creek Campground and the northwest corner of Mount Rainier National Park for nearly 90 years.

Actually, it's more than just a road. It's the most direct connection between people and The Mountain. This is a road through one of the few true temperate rainforests in the United States. The closest road from Seattle and Tacoma, this road is a historic landmark, a cultural resource, a pathway from city to wilderness.

It's also a road that is losing a constant battle with Mother Nature.

The floods come down the Carbon River almost every year now. The river doesn't even think of it as a flood – just that a lot of water is coming off the Mountain, and it's the river's job to take it down to the valley.

And the road? The road is in the way. The Carbon River Road runs right along the Carbon River, which seemed like a great idea in 1921 when it was built, but as the river now almost annually jumps its banks, it generally takes a few bites out of the road.

For decades, Mount Rainier officials considered that it was the key road for people to visit the northwest corner of the park, so they restored the road at great expense. And their policy was to keep restoring it.

But in 2004, they realized that the river has changed over the years, which is creating more – and worse – floods than ever. So they decided that the Carbon River Road would eventually be limited to "non-motorized use." They didn't expect, however, that it would happen so soon.

In November of 2006, a major storm destroyed substantial parts the road, leaving it passable (even after some rebuilding) by only hikers and mountain bikers.

This isn't the first time Mount Rainier administrators have had to deal with continually flooded roads. When a mountain has lots of glaciers, as Mount Rainier does, that means it will have lots of rivers. And those rivers often have inconsistent flows of water, which means some flooding.

The Westside Road, for instance, was routinely damaged by floods and mudflows, and was routinely pieced back together. Then in 1990, park administrators decided they couldn't keep up, and closed most of the road. It was a shame at the time, but visitors have become accustomed to thinking of the Westside Road as more of a wilderness area than when the road was open.

Unlike the Westside Road, the Carbon River Road has a popular campground at the end. What's more, the Ipsut Creek Campground doubles as one of the most popular trailheads in the park. Close the road, and Ipsut Creek will no longer be a destination for many visitors.

So, officials are trying to come up with a solution for the Carbon River Road – or at least the corridor adjacent to the river. They are trying to maintain at least some access for people to the northwest corner of the park.

With creative problem solving, there will be more than a dead end for this road.

The Options

Select one of the four following options for Mount Rainier National Park:

OPTION 1: Continue to rebuild the road following flooding
A 5-mile road from park entrance to Ipsut Creek Campground/Trailhead; expensive, but serves the most people

OPTION 2: Shuttle one-lane road for most of the way
Maintain formal 2-lane road for 1.25 miles; Build and maintain formal one-lane, 3.25-mile road for shuttle on road (also good for mountain biking); Hiking/mountain biking the remaining 0.5 miles to Ipsut Creek Campground/Trailhead

OPTION 3: Hiking/Mountain biking in road corridor
Maintain formal 2-lane road for 1.25 miles; build parking lot; Hiking/mountain biking the remaining 3.75 miles to Ipsut Creek Campground/Trailhead

OPTION 4: New wilderness hiking trail
Do not rebuild road at all; use as "scratched in" hiking/mountain biking trail; Build new wilderness hiking trail to Ipsut Creek Trailhead (bypassing river & flood danger)

The Documents

Analyze the following documents (which are provided) to help support your position

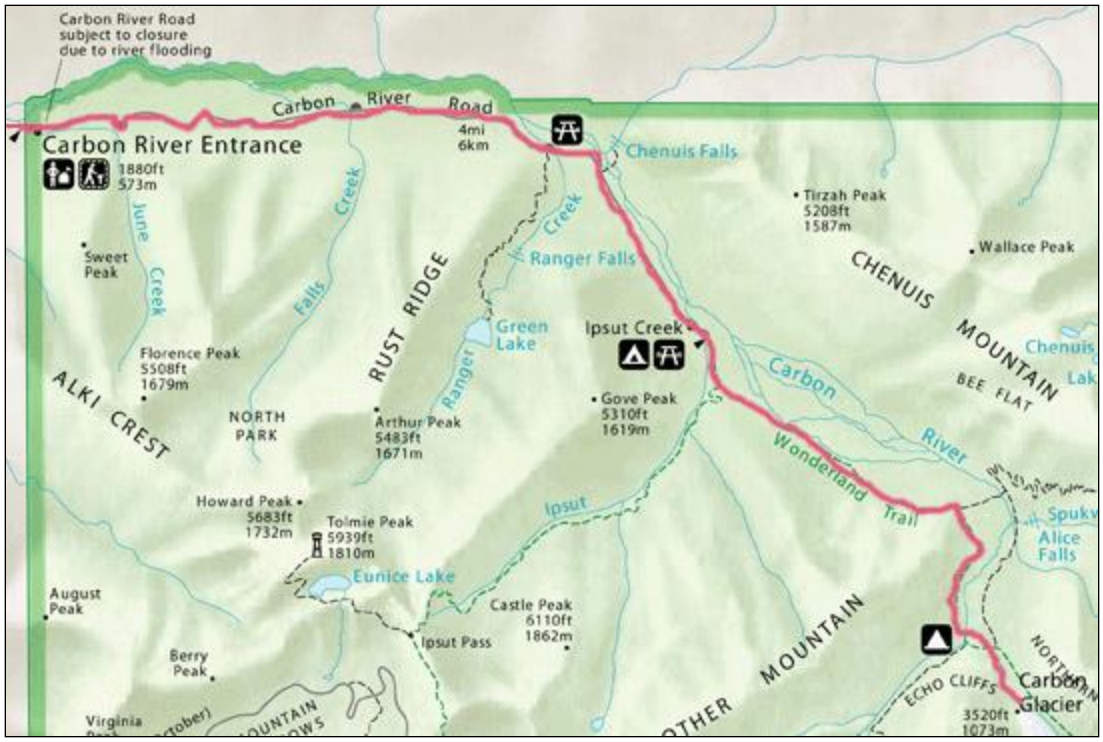
A) Preferred Options Comparison Chart
B) Organic Act, 1916
C) Mount Rainier Master Plan
D) National Park Service Natural Resource Policies
E) Mount Rainier Environmental Impact Statement
F) Surveys of Park Visitors
G) History of Flooding on Carbon River Road

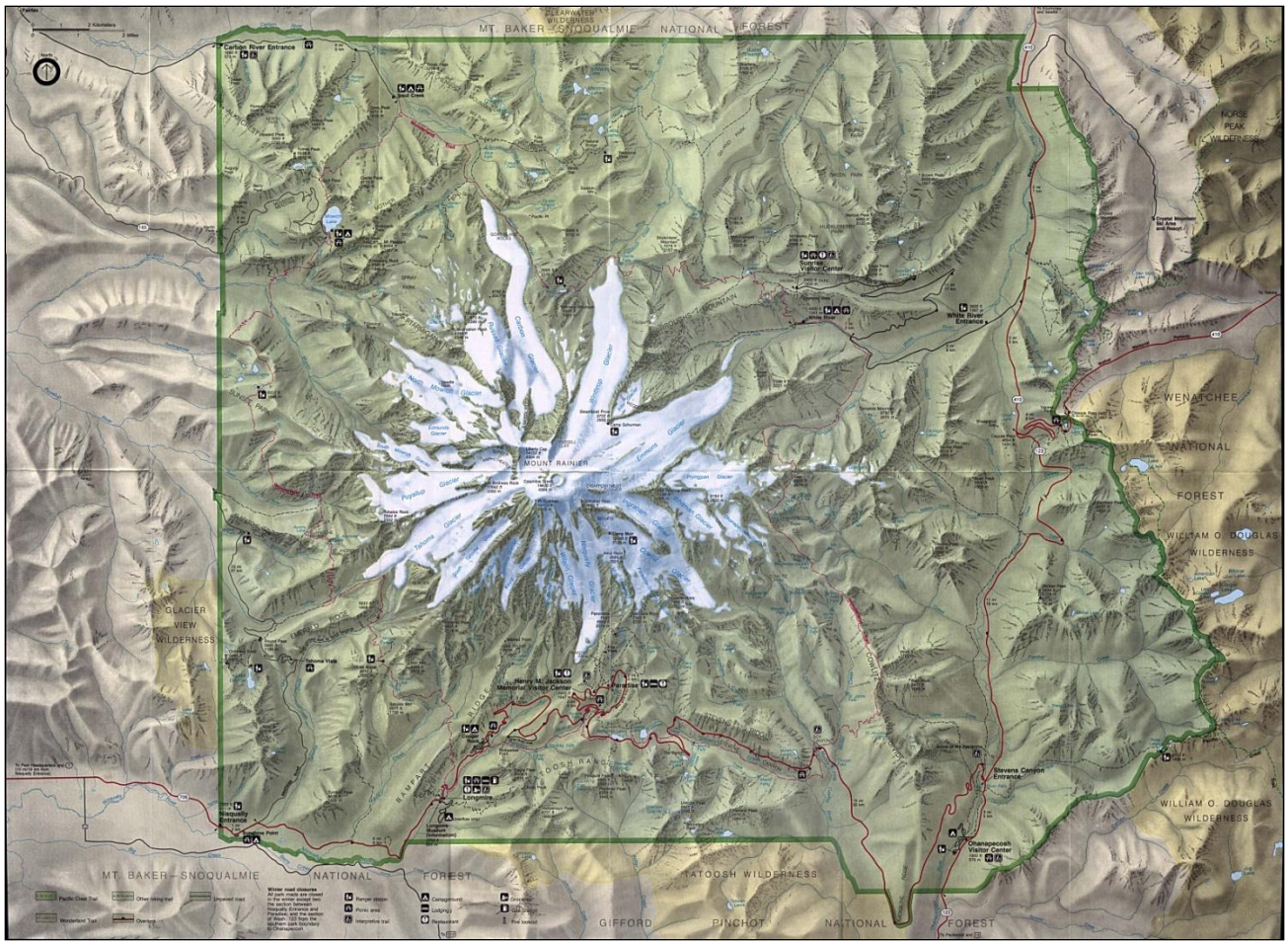
Categorizing

Your goal is to analyze the documents to find evidence to support an Option you select.

So, as you read the documents, you should create categories to sort key pieces of information that you glean from reading the documents. Sort them in any way you like… with the idea that you can then use some of these to support your position. One simple approach would be to categorize the documents by:

- Can be used to support Option 1
- Can be used to support Option 2
- Can be used to support Option 3
- Can be used to support Option 4
- Can be used to support any Option
- Not helpful


Carbon River Road
subject to closure
due to river flooding
Carbon River Road
4mi
6km
Carbon River Entrance
1880ft
573m
Chenuis Falls
Tirzah Peak
5208ft
1587m
Wallace Peak
Sweet
Peak
June
Creek
Falls
Creek
RUST RIDGE
Ranger Falls
Creek
CHENUIS
MOUNTAIN
Florence Peak
5508ft
1679m
Green
Lake
Ipsut Creek
Ranger
Carbon
River
Wonderland
Trail
ALKI CREST
NORTH
PARK
Arthur Peak
5483ft
1671m
Gove Peak
5310ft
1619m
BEE FLAT
Howard Peak
5683ft
1732m
Tolmie Peak
5939ft
1810m
Ipsut
Eunice Lake
Spuk
Alice
Falls
August
Peak
Castle Peak
6110ft
1862m
Ipsut Pass
Berry
Peak
ECHO CLIFFS
Carbon
Glacier
3520ft
1073m


MT. BAKER–SNOQUALMIE NATIONAL FOREST
Carbon River Entrance
NORSE PEAK WILDERNESS
WENATCHEE NATIONAL FOREST
WILLIAM O. DOUGLAS WILDERNESS
MOUNT RAINIER
GLACIER VIEW WILDERNESS
Nisqually Entrance
Stevens Canyon Entrance
Ohanapecosh Visitor Center
TATOOSH WILDERNESS
GIFFORD PINCHOT NATIONAL FOREST